

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claim 39. Please amend claims 37, 40, and 45 and add new claims 60-68 as follows:

Listing of Claims:

1-36. (Cancelled)

37. (Currently Amended) A method for planarizing a microelectronic substrate, comprising:

biasing the microelectronic substrate against a planarizing medium with a flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate, the second part located in a peripheral region of the microelectronic substrate and the first part located in a region of the microelectronic substrate outside of the peripheral region; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

38. (Original) The method of claim 37, further comprising:

engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

39. (Cancelled)

40. (Currently Amended) The method of claim ~~39~~38 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic

substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

41. (Cancelled)

42. (Original) The method of claim 37 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

43. (Original) The method of claim 37 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

44. (Original) The method of claim 37, further comprising forming the membrane by disposing a membrane material in a mold.

45. (Currently Amended) The method of claim 37, further comprising forming the membrane by providing a first ply of a membrane material at ~~the~~ a first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane.

46. (Original) The method of claim 37 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the

first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

47. (Original) The method of claim 37 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.

48-59. (Cancelled)

60. (New) A method for planarizing a microelectronic substrate, comprising:
forming a flexible membrane by providing a first ply of a membrane material at a first and second portions of the membrane and attaching a second ply of the membrane material to the first ply at the second portion of the membrane

biasing the microelectronic substrate against a planarizing medium with the flexible membrane to exert a first force on a first part of the microelectronic substrate and exert a second force greater than the first force on a second part of the microelectronic substrate; and

moving at least one of the microelectronic substrate and the planarizing medium relative to the other to remove material from the microelectronic substrate.

61. (New) The method of claim 60, further comprising:
engaging the first part of the microelectronic substrate with a first portion of the flexible membrane having a first thickness;

engaging the second part of the microelectronic substrate with a second portion of the flexible membrane having a second thickness greater than the first thickness.

62. (New) The method of claim 61 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially inwardly from the first annular part of the microelectronic substrate.

63. (New) The method of claim 61 wherein engaging a first part of the microelectronic substrate includes engaging a first annular part of the microelectronic substrate and engaging the second part of the microelectronic substrate includes engaging a second annular part of the microelectronic substrate disposed radially outwardly from the first annular part of the microelectronic substrate.

64. (New) The method of claim 60 wherein the membrane has a first surface facing toward the microelectronic substrate and a second surface facing generally opposite the first surface, further wherein biasing the microelectronic substrate against the planarizing medium includes biasing a generally flat support member against the second surface of the membrane.

65. (New) The method of claim 60 wherein biasing the microelectronic substrate against a planarizing medium includes biasing the microelectronic substrate against a first portion of a polishing pad, further wherein moving the at least one of the microelectronic substrate and the planarizing medium includes advancing the polishing pad from a supply roller to a take-up roller to engage a second portion of the polishing pad with the first and second parts of the microelectronic substrate

66. (New) The method of claim 60, further comprising forming the membrane by disposing a membrane material in a mold.

67. (New) The method of claim 60 wherein moving at least one of the microelectronic substrate and the planarizing medium relative to the other includes moving the first part of the microelectronic substrate and the planarizing medium at a first linear velocity relative to each other and moving the second part of the microelectronic substrate and the planarizing medium at a second linear velocity relative to each other, further wherein removing material from the microelectronic substrate includes removing material from the first part of the microelectronic substrate at a first rate and removing material from the second part of the microelectronic substrate at a second rate approximately the same as the first rate.

68. (New) The method of claim 60 wherein the membrane is the first of a first and second membrane, each membrane having a first portion with a first thickness and a second portion with a second thickness, a ratio of the first thickness to the second thickness of the first membrane having a first value, a ratio of the first thickness to the second thickness of the second membrane having a second value different than the first value, further comprising selecting the first membrane from the first and second membranes.